

1 power line carrier.

2 **Q3. What is the purpose of your testimony?**

3 Response: The purpose of my testimony is to explain Big Rivers' concerns about the
4 impact of the Thoroughbred project on Big Rivers, its transmission system, and its
5 customers, and to request action of the Board that will resolve these concerns.

6 **Q4. Please describe the Big Rivers control area, and the adequacy of Big Rivers'
7 transmission system to handle power moved within and from that control area.**

8 Response: The Big Rivers control area currently contains approximately 1800 MW of
9 generation located at four different sites throughout the control area footprint. Big Rivers'
10 transmission system is currently sufficient to deliver power to the loads within the control
11 area and export all excess power to neighboring systems as needed. The addition of
12 Thoroughbred's proposed 750 MW of generation will necessitate substantial improvements
13 to Big Rivers' existing transmission system, as well as to neighboring transmission systems.

14 **Q5. What transmission additions and improvements will be required for Big Rivers to
15 handle the additional load flow from the proposed Thoroughbred generating facility?**

16 Response: Two types of transmission additions would be required on the Big Rivers
17 transmission system to accommodate Thoroughbred's proposed generation facility:
18 interconnection facilities additions, and network facilities additions. Interconnection
19 facilities are those facilities required to connect the new generation to Big Rivers'
20 transmission network. Network facilities additions are improvements to Big Rivers existing
21 system needed to bolster it to the point that it can transport the new generation to purchasers
22 within the control area, or to the points of interconnection with neighboring control areas.
23 Improvements to neighboring transmission systems would also be required.

24 More specifically, the proposed Thoroughbred plant would interconnect with
25 Big Rivers' transmission grid at the Big Rivers-owned Wilson substation in Ohio County.
26 Big Rivers has conducted load flow, short circuit, and transient stability studies to evaluate
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1 the transmission interconnection of the power plant to the system. As a result of these
2 studies, the following network upgrades were found to be necessary to allow the
3 interconnection of the Thoroughbred Generating Station to the Big Rivers transmission
4 system:

5 a. Wilson to Thoroughbred 345 kV circuit. On a newly acquired right-of-
6 way, an 11-mile single circuit steel H-frame 345 kV line would be
7 constructed.

8 b. Wilson to Thoroughbred double circuit. On the same newly acquired right-
9 of-way described in a. (above), an 11-mile double circuit 345/161 kV single
10 pole tubular steel line would be constructed. The 345 kV portion of this line
11 would be used to connect Wilson to Thoroughbred. The 161 kV portion of
12 the line would be used as part of a proposed Wilson to Paradise 161 kV
13 interconnection, as further described in c, below.

14 c. Wilson to Paradise 161 kV circuit. This circuit would utilize the 161 kV
15 portion of the double circuit described in item b (above). The line would also
16 require 13 miles of newly acquired right-of-way and the construction of a 13
17 mile 161 kV line using a single pole tubular steel design. This circuit would
18 connect the Wilson substation to the TVA's 161 kV Paradise substation with
19 the line routed near Thoroughbred, but not terminated at that location.

20 d. A new 345 kV switching station would be constructed approximately 9
21 miles east of Owensboro, Kentucky. This station would connect the existing
22 Big Rivers Wilson to Coleman EHV 345 kV circuit to the existing Kentucky
23 Utilities Elmer Smith to Hardin County 345 kV circuit.

24 The total cost of the network facilities required by Big Rivers is estimated by
25 Burns & McDonnell to be \$37,483,361. These upgrades and costs are discussed in the
26 Commonwealth Associates study, which may be found in Section 5 of Thoroughbred's
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1 application.

2 In addition, other facility additions or modifications would be required by
3 Owensboro Municipal Utilities, KU, and TVA to complete these network upgrades. The cost
4 of these additional facilities is not known to Big Rivers. Third party network upgrades related
5 to the generator addition, but not directly related to above described additions, are also
6 required by Owensboro Municipal Utilities and KU. The cost of these facilities has not been
7 provided to Big Rivers.

8 **Q6. Has Big Rivers met with representatives of Thoroughbred concerning transmission**
9 **issues?**

10 Response: Yes. As is pointed out in Thoroughbred's application, Thoroughbred and Big
11 Rivers have communicated extensively on the subject of transmission of Thoroughbred-
12 generated power across the Big Rivers transmission system. The study on that subject
13 performed by Commonwealth Associates is attached to Thoroughbred's application.

14 **Q7. Will the Thoroughbred facility's use of the Big Rivers transmission system adversely**
15 **affect the reliability of service for retail customers of Big Rivers' member cooperatives?**

16 Response: If the transmission additions and improvements identified in the
17 Commonwealth Associates study are not constructed, Thoroughbred's interconnection with
18 and use of the Big Rivers transmission system would adversely affect the reliability of service
19 for retail customers of Big Rivers' member cooperatives. As concluded in the
20 Commonwealth Associates study mentioned above, those adverse effects can be mitigated by
21 construction of the additions and improvements identified in that study. Big Rivers believes
22 the Commonwealth Associates study is correct, but if reality requires more additions and
23 improvement, Big Rivers would expect them to be made and paid for on the same terms and
24 conditions as the initial improvements.

25 **Q8. What is Big Rivers' position about who should pay the costs and expenses associated**
26 **with the improvements and additions to its transmission system required by the**

1 **Thoroughbred load?**

2 Response: Big Rivers believes that its customers should not bear the costs of
3 interconnecting merchant generating facilities with the Big Rivers system. Those costs
4 should be borne by the merchant generator, which will reap the benefits of the
5 interconnection, rather than Big Rivers' members. My understanding is that the policy of the
6 Commonwealth of Kentucky, as reflected in the law, requires a merchant generator, such as
7 Thoroughbred, to pay solely any costs or expenses associated with interconnecting its
8 generating facility with the existing electricity transmission grid in Kentucky, and with
9 upgrading the existing electricity transmission grid as necessary to reliably accommodate the
10 interconnection. In this case, Big Rivers considers it appropriate that Thoroughbred bear the
11 costs of all interconnection facilities and network upgrades because it will benefit from them.
12 This would be consistent with my understanding of Kentucky law, and would protect
13 Kentucky ratepayers from the costs of interconnecting merchant generation in Kentucky.

14 **Q9. Has Thoroughbred agreed to pay these costs?**

15 Response: No. Big Rivers has no agreement with Thoroughbred about the costs that
16 Thoroughbred will pay. Thoroughbred states in its responses to Big Rivers data requests 4, 6
17 and 7 that it will comply with FERC policy, and does not mention the requirements of
18 Kentucky law. Before an interconnection actually occurs, Big Rivers and Thoroughbred
19 must negotiate an interconnection agreement, and that agreement must be approved by the
20 Kentucky Public Service Commission. Big Rivers' assumption is that it will own the
21 facilities described on page 3, above, and will expect that term to be in the interconnection
22 agreement. Big Rivers' ownership of these facilities means that it must obtain a certificate of
23 public convenience and necessity from the Public Service Commission before commencing
24 construction.

25 One of Big Rivers' concerns is that it does not want to be trapped somewhere
26 between or among the interconnection, siting and construction authorization policies and

1 laws of FERC, the Public Service Commission, the Siting Board and the Commonwealth of
2 Kentucky. For example, if the responsibility of Thoroughbred for interconnection costs
3 under Kentucky law is specified in the order of the Siting Board, Big Rivers is concerned
4 with the risk of a conflicting order from the Public Service Commission when Big Rivers
5 seeks approval of the Big Rivers - Thoroughbred interconnection agreement, and issuance of
6 a certificate of convenience and necessity for construction of the facilities required under that
7 agreement.

8 **Q10. Thoroughbred asserts in its response to Big Rivers Data Request No. 18 that Big Rivers**
9 **will benefit from the interconnection of its facilities with Thoroughbred. Do you agree?**

10 Response: I agree that there is a potential for Big Rivers to benefit from being
11 interconnected with Thoroughbred. But as it has generally done in its application,
12 Thoroughbred has listed the benefits of the interconnection without identifying the
13 corresponding risks.

14 I assume that, consistent with Kentucky law, Thoroughbred will pay the up-
15 front costs and expenses associated with the interconnection. But Big Rivers will have
16 ongoing, unlimited responsibility for capital costs and operating and maintenance costs
17 associated with these facilities, including full responsibility for repairs and replacements.

18 Revenue Big Rivers will receive from Thoroughbred for use of these facilities
19 will obviously offset the costs and expenses associated with the additional facilities. But
20 transmission revenue assumes use of the transmission system by Thoroughbred. If the
21 interconnection and network upgrade facilities are constructed, and Thoroughbred does not
22 use the transmission system, or does not use it as much as contemplated, there will be a
23 corresponding reduction in revenue. So it is very important to Big Rivers that
24 interconnection costs are paid by Thoroughbred up front, and that there are no opportunities
25 for Big Rivers or its members to be saddled with responsibility for those costs if
26 Thoroughbred's anticipated level of use of the Big Rivers transmission system does not
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1 materialize.

2 Any indirect benefits to the transmission system resulting from the
3 interconnection with Thoroughbred must be tempered by the fact that, as I have noted above,
4 the Big Rivers transmission system is currently fully capable of meeting Big Rivers' system
5 requirements. In other words, in the absence of Thoroughbred, Big Rivers would not need
6 the system improvements and upgrades that are identified in the Commonwealth Associates
7 study. In fact, none of those improvements is in Big Rivers' ten-year transmission
8 construction plan. Because Thoroughbred alone is making those improvements and upgrades
9 necessary, it alone should be required to pay for them.

10 **Q11. What is your understanding about current FERC interconnection policy as it might**
11 **relate to who bears the cost of these transmission system improvements?**

12 Response: Big Rivers is not currently a public utility subject to FERC's jurisdiction. Big
13 Rivers has an open access tariff on file with FERC that conforms with FERC's transmission
14 reciprocity standards so that Big Rivers can take advantage of the availability of open access
15 transmission service on other transmission systems. Big Rivers' transmission tariff does not,
16 however, make Big Rivers a FERC-jurisdictional utility.

17 FERC recently issued a Final Rule on Standardization of Generator
18 Interconnection Agreements and Procedures ("Interconnection Final Rule"). Under the
19 policies FERC articulated in the Interconnection Final Rule, the interconnection customers of
20 FERC-jurisdictional public utilities should be directly assigned the cost of interconnection
21 facilities. Public utilities also may assess the full cost of network facilities additions to the
22 interconnection customer, but in such case the public utility transmission provider is
23 obligated to credit those charges back to the interconnection customer over the five-year
24 period following the operation date of the network additions through transmission charge
25 credits. During the first five years of operation the interconnection customer pays its
26 transmission bill to the transmission provider, net of transmission credits issued by the
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1 transmission provider. This procedure is followed until the transmission charge credits are
2 exhausted, after which time the interconnection customer continues to pay for transmission
3 services at the same rate applicable to other transmission customers, but receives no further
4 credits.

5 The application of FERC's interconnection policies to Big Rivers, a non-
6 public utility, is less clear. In the Interconnection Final Rule, FERC reiterated its reciprocity
7 requirements, by which non-public utilities that wish to take open access transmission service
8 on public utility systems must have reciprocity tariffs on file with FERC with rates, terms,
9 and conditions of service comparable to FERC's *pro forma* open access transmission service.
10 Big Rivers has such a reciprocity tariff on file with FERC. FERC further stated that a non-
11 public utility that has a "safe harbor" reciprocity tariff can add to its tariff FERC's
12 standardized interconnection procedures and interconnection agreement "if it wishes to
13 continue to qualify for safe harbor treatment." However, with respect to transmission credits,
14 FERC stated that it would not require that a non-public utility also provide transmission
15 credits for network upgrade costs in order to satisfy the Commission's reciprocity condition.

16 The language of the Interconnection Final Rule appears to mean that FERC's
17 standard interconnection policy applicable to public utilities is not fully applicable to non-
18 public utilities, such as Big Rivers. The Interconnection Final Rule seems to relieve Big
19 Rivers of any requirement that it pay transmission credits to Thoroughbred with respect to the
20 costs it would assess to Thoroughbred for network facilities additions. In such case Big
21 Rivers would be precluded by FERC's other transmission pricing policies from rolling in the
22 costs of the network facilities additions into Big Rivers' transmission service rates --
23 otherwise Big Rivers would violate FERC's prohibition against charging both an incremental
24 and rolled-in charge for transmission service. Big Rivers believes that charging
25 Thoroughbred the costs of network facilities additions and not rolling in those costs would be
26 the best result for its transmission customers and would be consistent with Kentucky law.

1 An alternate method for paying for transmission additions would be for the
2 total cost of network improvements to be paid for by the transmission provider, which will
3 roll those costs into its transmission rates applicable to all users of its transmission system.
4 This effectively causes the existing transmission customers to support some of the cost of the
5 merchant plant's transmission requirements, and is not fully consistent with my
6 understanding of Kentucky law. This is a very onerous prospect for a not-for-profit, member-
7 owned transmission provider like Big Rivers.

8 **Q12. What effect would application of the FERC policy have on Big Rivers' position about**
9 **who should bear the costs of transmission improvements required to accommodate**
10 **power produced by the Thoroughbred facility?**

11 Response: If only FERC policy under the Interconnection Final Rule applicable to
12 public utilities were to apply to the recovery of transmission expenditures incurred by Big
13 Rivers to handle the load of Thoroughbred, first the entire cost of the interconnection
14 facilities must be born by the applicant. Second, the cost of all network improvements on
15 Big Rivers' transmission system must be borne by the applicant. In the alternative, if the
16 transmission credit method is used to pay for network improvements, the applicant must
17 subscribe for transmission services sufficient to exhaust all the credits with in the first five
18 years, with Big Rivers having no obligation under any circumstances to redeem any credits
19 with cash.

20 Third, the cost of network improvements on neighboring transmission systems
21 must be borne by the applicant without raising the transmission rates of those systems above
22 their current levels in order that Kentucky ratepayers purchasing transmission service from
23 these systems will not be subsidizing the applicant's new generation cost through higher
24 transmission cost when using neighboring transmission systems.

1 **Q13. Does application of the FERC policy contain some risk for Big Rivers and its members**
2 **with respect to recovery of the costs and expenses incurred by Big Rivers on its**
3 **transmission system to handle the load of Thoroughbred?**

4 Response: Yes. My understanding is that Kentucky law prohibits Big Rivers from
5 including in its rates any costs or expenses associated with upgrading the existing electricity
6 transmission grid as a result of the additional load caused by a merchant electric generating
7 facility. If the costs and expenses recoverable by Big Rivers under FERC policy do not cover
8 all costs and expenses incurred by Big Rivers, Big Rivers will have no source from which it
9 can recover those costs and expenses.

10 **Q14. Would interconnection of Thoroughbred cause Big Rivers to join MISO or some other**
11 **RTO?**

12 Response: No. Big Rivers' position is that its existing transmission system is sufficient
13 to deliver power to its member cooperatives' substations, to import power when needed from
14 neighboring systems, and to sell excess power to neighboring systems or RTOs. So there is
15 no service provided by an RTO that Big Rivers needs. At this time, with the laws and
16 regulations as they are currently written, the only thing RTO membership would bring to Big
17 Rivers' member systems is additional costs.

18 Big Rivers' high-level review of the MISO membership costs reveals that,
19 apart from higher transmission rates, Big Rivers' control area native load would experience
20 an additional charge of about \$0.12 kW-month to recover MISO infrastructure and operations
21 costs.

22 Thoroughbred notes in response to Big Rivers' Data Request No. 10 that it
23 plans to join MISO and other RTOs that form in the Midwest region, and would support Big
24 Rivers doing likewise. Big Rivers does not plan to join MISO or any other RTO for the
25 reasons stated, and would resist any attempt by Thoroughbred to force it to do so unless
26 Thoroughbred is willing to accept full responsibility for the costs of joining and belonging.
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1 **Q15. Does this conclude your testimony?**

2 Response: Yes.

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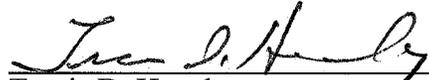
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VERIFICATION

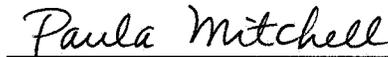
I verify, state, and affirm that the foregoing testimony is true and correct to the best of my knowledge and belief.



Travis D. Housley

STATE OF KENTUCKY
COUNTY OF HENDERSON

Subscribed and sworn to before me by Travis D. Housley on this the 6th day of October, 2003.



Notary Public, Ky. State at Large
My Commission Expires 1-12-05